

REMARKS

This is a full and timely response to the outstanding final Office Action mailed January 21, 2004. Upon entry of the amendments in this response, claims 1 – 9, 13 – 14 and 16 - 18 remain pending. In particular, Applicants have amended claims 1, 9 and 14. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

Rejections Under 35 U.S.C. §112

The Office Action indicates that claims 1 – 9, 13 – 14 and 16 - 18 stand rejected under 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement. Applicants respectfully traverse the rejection. Specifically, as set forth above, Applicants have amended independent claims 1, 9 and 14 and respectfully assert that the rejection has been rendered moot.

Rejections under 35 U.S.C. §103

The Office Action indicates that claims 1 – 9, 13 – 14 and 16 - 18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Ahearn* in view of *Anstey*. Applicants respectfully traverse the rejection for at least the reasons indicated below.

As an initial matter, Applicants respectfully assert that *Ahearn* has been cited in the Office Action for various teachings, including an open shortest path first (OSPF) functionality. This OSPF functionality has generally been alleged to anticipate those aspects of Applicants' invention that involve determining a shortest probable path between a start node and an end node. However, Applicants respectfully note that OSPF functionality is a router-based protocol. That is, OSPF functionality is something that routers along a path can perform for transferring routing information between nodes. Notably, OSPF functionality can

include various factors, such as transferring data to an adjacent node based on lowest cost, as opposed to fewest number of hops. Note, also that *Ahearn* involves depicting the OSPF area topology, which includes numerous routers and numerous paths. The shortest path between nodes in this OSPF area topology is not determined by *Ahearn*. Therefore, Applicants respectfully assert that the reliance on the OSPF functionality of *Ahearn* has been misplaced.

Turning now the claims, claim 1, as amended, recites:

1. A method for determining paths between a start node and an end node of a communication network, the communication network being formed of sub-networks, the sub-networks having connectors and segments, the segments interconnecting various ones of the connectors, the start node corresponding to one of the connectors and the end node corresponding to another of the connectors, said method comprising:

storing, in a topology database, information corresponding to connectors and segments of the communication network;

receiving, from an operator, information corresponding to the start node and the end node;

receiving, from the operator, information corresponding to a type of connector of interest; and

in response to the information received, automatically determining a shortest path between the start node and the end node based upon the type of connector of interest by using only the information stored in the topology database.

(Emphasis Added).

Applicants respectfully assert that *Ahearn* is legally deficient for anticipating claim 1, because at least the features/limitations emphasized above are not taught or otherwise disclosed by *Ahearn*. Specifically, Applicants respectfully assert that *Ahearn* does not teach or otherwise disclose at least "in response to the information received, automatically determining a shortest path between the start node and the end node based upon the type of connector of interest by using only the information stored in the topology database."

Therefore, Applicants respectfully assert that claim 1 is in condition for allowance. Since claims 2 - 8 incorporate all the features/limitations of claim 1, Applicants respectfully assert that these claims also are in condition for allowance.

Claim 9 recites:

9. A system for determining paths between a start node and an end node of a communication network, the communication network being formed of sub-networks, the sub-networks having connectors and segments, the segments interconnecting various ones of the connectors, the start node corresponding to one of the connectors and the end node corresponding to another of the connectors, said system comprising:
 - a processor;
 - a discovery mechanism associated with said processor, said discovery mechanism configured to generate and store topology data specifying connectors and segments of a communication network; and
 - a layout mechanism associated with said processor and interfaced with said discovery mechanism, said layout mechanism configured to receive said topology data from said discovery mechanism, said layout mechanism configured to drive a display based upon said topology data,
said discovery mechanism being configured to determine a shortest probable path between a start node and an end node by using only said topology data, said shortest probable path being defined by a path with a lowest hop count between the start node and the end node.

(Emphasis Added).

Applicants respectfully assert that *Ahearn* is legally deficient for anticipating claim 9, because at least the features/limitations emphasized above are not taught or otherwise disclosed by *Ahearn*. Specifically, Applicants respectfully assert that *Ahearn* does not teach or otherwise disclose at least “said discovery mechanism being configured to determine a shortest probable path between a start node and an end node by using only said topology data, said shortest probable path being defined by a path with a lowest hop count between the start node and the end node.” Therefore, Applicants respectfully assert that claim 9 is in condition for allowance.

Claim 14 recites:

14. A computer readable medium having a computer program for determining paths between a start node and an end node of a communication network, the communication network being formed of sub-networks, the sub-networks having connectors and segments, the segments interconnecting various ones of the connectors, the start node corresponding to one of the

connectors and the end node corresponding to another of the connectors, said computer readable medium comprising:

logic configured to store information corresponding to a topology of the communication network;

logic configured to receive information corresponding to the start node and the end node;

logic configured to receive information corresponding to a type of connector of interest; and

logic configured to determine, automatically and in response to the information received, a shortest probable path between the start node and the end node based upon the type of connector of interest by using only the information corresponding to the topology of the communication network. (Emphasis Added).

Applicants respectfully assert that *Ahearn* is legally deficient for anticipating claim 14, because at least the features/limitations emphasized above are not taught or otherwise disclosed by *Ahearn*. Specifically, Applicants respectfully assert that *Ahearn* does not teach or otherwise disclose at least "*logic configured to determine, automatically and in response to the information received, a shortest probable path between the start node and the end node based upon the type of connector of interest by using only the information corresponding to the topology of the communication network.*" Therefore, Applicants respectfully assert that claim 14 is in condition for allowance.

Since claims 16 - 18 incorporate all the features/limitations of claim 14, Applicants respectfully assert that these claims also are in condition for allowance.

Prior Art Made of Record

The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 1 - 9, 13 - 14 and 16 - 18 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,



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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Assistant Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450, on 3/9/04.

Stephanie Freley
Signature